J. Sargeant Reynolds Community College Course Content Summary

Course Prefix and Number: HIM 130 Credits: 3

Course Title: Healthcare Information Systems

Course Description: Teaches basic concepts of microcomputer software (to include operating systems, word processing, spreadsheets, and database applications). Focuses on microcomputer applications and information systems in the health care environment. Provides a working introduction to electronic health information systems for allied health, teaching students how the adoption of electronic health records affects them as future health care professionals. Prerequisite: ITE 115. Lecture 3 hours per week.

General Course Purpose: This course is designed to provide a working introduction to the topics, issues, trends, and uses of health care information systems across various professions. Understanding health information systems, microcomputer software (to include operating systems, word processing, spreadsheets, and database applications), information systems' life cycle, reengineering, and the special needs in health care.

Course Prerequisites and Co-requisites:

Prerequisites: ITE 115

Student Learning Outcomes:

Upon completing the course, the student will be able to

- a. Identify, discuss, and use important categories of application software; word processing, spreadsheet, database management, and preparation of presentations and graphs;
- b. Describe a basic understanding of The Joint Commission (TJC) health care information technology regulations;
- c. Describe the factors that led to the emergence of electronic health records;
- d. Describe the functions of electronic health records and explain the advantages they offer over paper-based records;
- e. Demonstrate an understanding of how paper records are converted to an electronic health record system:
- f. Explain the importance of clinical standards in the development of interoperable electronic health records;
- g. Demonstrate an understanding of how electronic health records are used in physician practices and other outpatient settings:
- h. Demonstrate an understanding of how electronic health records are used in hospitals;
- i. Describe the different types of personal health records and explain how personal health records differ from electronic health records;
- j. Demonstrate an understanding of the challenges that electronic health information poses to the privacy and security of patient's health information;
- k. Demonstrate an understanding of how HIPAA privacy and security rules apply and may not provide adequate protection in today's health care environment;
- I. Effectively utilize information technology and medical terms as they apply to electronic health records:
- m. Identify concepts that are unique to health care information systems; and
- n. Describe the basic structure of a health information system.

Major Topics to Be Included:

- a. Microcomputer applications in health care
- b. EHR in ambulatory care and other health care settings
- c. Systems life cycle
- d. The reengineering methodology
- e. Use of computers to create, calculate, structure, and present data that is related to health care
- f. Exploration of health care information technology in different settings
- g. Understanding microcomputers and their role in the health care environment
- h. Data and file structure
- i. Word processing applications in the EHR
- j. HIPAA and the EHR functions
- k. Database, creation, modifying, sorting, and queries
- I. Internet and its role in health care
- m. How to research the Internet and health care sites
- n. How to evaluate reputable Internet information
- o. Basic use of electronic mail for communications

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